# Assessment of Computer and Information Literacy among Students

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## Abstract

A study was conducted in Dr. Babasaheb Ambedkar Marathwada University Library; Aurangabad to know the computer and information literacy of students of various departments who are visiting to library .Questionnaire was used as a data collection tool. The study found that 8.11% of the Participants are not able to use the computer and many of them do not possess the knowledge of software, hardware, storage devices etc.5.13% of the total respondents are not able to use the Internet. And the study found that the lack awareness regarding such techniques etc. The majority of the participant Research student opine that the computer literacy and information literacy programmes are most needed for them .

#### Keywords

Literacy, information and communication technology, University Libraries.

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#### INTRODUCTION

The 21st century has brought enormous change in higher education throughout the world as a result of new information and technological developments. We are outfitting our schools, libraries, and homes with electronic technologies--but are we preparing our students onslaught of information that is provided by these technologies? What happens when the student can get more information from the Internet than previously conveyed by a teacher or a textbook? What should a student do when faced with so many informational possibilities? Which of the information is credible and which is not?

Librarians, administrators, and the community must collaborate to develop ways to involve the students not only in using classroom materials but also in using resources from the broader community and the mass media. in this context university libraries needs to be dynamic take the leading role in assessing the information literacy and computer literacy competence of the students and plan for conducting such programmes to improve the situation one such attempt has been made by the Author and the result have been reported here. This Study that investigates what it is like to be a research student in the digital age. We seek to understand how research students find information and conduct research—their needs, strategies, and workarounds-for their course work and for addressing issues that arise in their everyday lives.

#### **REVIEW OF LITERATURE:**

Numbers of research papers have been published so far covering the basic concept of IL (Harris and Millet, 2006); (Ramesha, 2008); (Lloyd, 2008); designing of IL programmes for different types of users (Satish and Vishakha, 2006), IL skills learning and instruction and technology (Godwin, 2009); Walsh, 2010, An ongoing survey of information literacy competencies of graduate students of University of California- Berkeley (Davitt Maughan, 2001) also examines the extent of which undergraduate students are information literate. of Information Literacy Skills among Science Students of Andhra University (Sasikala, C. & Dhanraju, V, 2011

# DEFINITION OF INFORMATION LITERACY AND COMPUTER LITERACY:

## 1. Information literacy:

American Library Association's (1989). Presidential Committee on Information Literacy, Final Report states, "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information"

# 2. Computer literacy:

Computer literacy is defined as the knowledge and ability to use computers and technology efficiently. Computer literacy can also refer to the comfort level someone has with using computer programs and other applications that are associated with computers. Another valuable component of computer literacy knows how computers work and operate. Having basic computer skills is a significant asset in the developed.

# IMPORTANCE OF INFORMATION LITERACY AND COMPUTER LITERACY IN HIGHER EDUCATION

Information literacy is the solution to Data Smog. It allows us to cope by giving us the skills to know when we need information and where to locate it effectively and efficiently. It includes the technological skills needed to use the modern library as a gateway to information. It enables us to analyze and evaluate the information we find, thus giving us confidence in using that information to make a decision or create a product.

Information Literacy supporting users to achieve a range of skills & self directed learning

# DR.BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY LIBRARY, AURANGBAD:

The functioning of the university library started in Dec., 1959 Foundation stone of the library building was laid on 16th October 1960 by the then Chief Minister of Maharashtra Shri Yashwantraoji Chavan; it was inaugurated at the hands of President Dr. Sarvapalli Radhakrishnan on 25th March 1966. In May 1966 Library shifted to its new building on University campus. The large collection of 45,000 books acquired from Raja Shamraj Rai Rajwant Bahadur, Hyderabad, in the year 1960. U.G.C. sanctioned the scheme of opening study center in the city in the year 1970. Internet and E-mail services started from 2005. Facsimile service started from 2007 UGC and INFLIBNET have sanctioned

INFONET Project to the Library. But, it was under control of Department of Computer Science.

#### **Application of Information Technology:**

Application of Barcode with magnetic Tattle tape for books available in the library was done. Library having an Internet Laboratory with 90 computers and also develop the e-library with 35 computers with eresources for the res Research scholars to access internet & online Resources. c. SOUL software which is developed by INFLIBNET is used in the library to develop books, theses databases. Then SOUL 2.0 developed by INFLIBNET is used in the library. And 3, 66,393 books have been entered including 4418 Ph.D Thesis and 200 + print Journals and Magazines by the end of November. 2013. IP Based Cameras with Day Night Vision Weather proof are fixed in every section of Library. e. The work of Stock Inventory Control Management work is in Progress for Stock verification of books with the help of barcode technology. The Smart Card (4000) will be issued to all students, teachers and research scholars by the library. Library having 19000+ ejournals and 3Millions e-books, e-documents with 16 databases including UGC-Infonet e-journal consortia, EBSCO databases, IEEE computer society digital library, JCCC, e-jurix law database ,e-theses databases,CD/DVD database library uses the FEDGET Federated Search Engine EZPROXY software for giving the remote access of e-journals and e-books ,TURNITIN Preventing Plagiarism software for avoided copy & paste practices Web Café Management Software. Library having huge collection millions of e-resources, good ICT infrastructure, skillful staff, digitized material etc. library also provide good quality services to the users.

## **OBJECTIVES**

The objectives of the study are

- 1. To examine the students ability to use computers
- 2. To know the students ability to use the Internet
- 3. To know the students ability to specify electronic information sources to solve specific information problems for fulfill the students information need
- 4. To know the students Search Techniques Awareness
- 5. To know the need of students about information literacy and computer literacy programmes in making them self-learners and life-long learners.

#### **SCOPE**

The present work is delimited to the Dr. Babasaheb Ambedkar Marathwada University Library Aurangabad to know the computer literacy and Information literacy of the 148 participant student users only

#### **METHODOLOGY:**

The survey method was adopted for the present study and a questionnaire was used as a data collection tool. The majority of the questions were objective type designed keeping the objective of the study in view. The questionnaire was distributed to all the students of PG and Research student of M.phil and Ph.D came from various departments (Sciences, Social Sciences, and Languages to visit the library. In total 148 (coming from 40 different departments) students were included for the questionnaires ware distributed among the students and asked of fill-up the same by allowing sufficient time. Assistance to clear the doubts, if any with regard to the question was extended by the Author (library professional staff).

# DEGREE-WISE DISTRIBUTION OF RESPONDENTS:

Table 1:Degree-wise Distribution of Respondents N=148

		11=17
Degree-wise	No. of	Percent
Distribution	Respondents	
M Phil Student	17	11.49%
Ph.D Student	14	09.46%
PG Students	117	79.05%
Total	148	100.00%

It is found from the Table 1. That, more or less, the students covered in the study belong to the post graduate students from different disciplines (Sciences, Social Sciences, Humanities, Languages (79.05%) and M.Phil students (11.49%). However, (9.46%) of students represent PhD, which is less when as compared to post graduate and M.Phil Students mainly because of the research students' population is less than post graduate students and M.Phil students

## FREQUENCY OF USE OF LIBRARY:

Table 2: Frequency of Using Library by Respondents

N = 148

Frequency of Using	No. of	Percent
Library	Respondents	
Every day	79	53.38
Alternate day	34	22.98
Once in a week	33	22.29
Occasionally	02	1.35
Do not use library	0	0%
Total	148	100%

It is clear from the Table 2 that, all the respondents of the study i.e. Post Graduate and research Students of university area in the habit of using the library. Among them, about 53.38% of respondents visit the library everyday, 22.98% of respondents visit the library every alternate day, 22.29% of respondents visit once in a week, 1.35% of respondents visit the library occasionally and a very negligible portion opine that they do not use library. It means all students have a need of library for fulfill their information need

#### ABILITY TO USE COMPUTER

In order to use the information available in electronic form the students are expected to be computer literate includes skill how to start computer, skill to operate computers, knowledge of hardware, software, and storage devices. The questions were realized to examine the computer literacy of the research student and the data is given in Table 3.

Table 3: Research students' ability to Use Computer

N=148

		11-110
Students ability to Use the Computer	Students do not have ability to Use the Computers	Students not responded
136(91.89%)	12(8.11%)	0 (0%)

Table 3 reveals that 91.89 % of the research students know to operate computers.8.11 % of the research students do not know computer operation. In order to know the familiarly of some popular aspects of the IT environment few questions were raised and the data is presented in Table 4.

Table 4: Research students Knowledge of Computer (More than one answer)

N=136

Computer Related questions	No. of Research student possess knowledge	No. of Research student do not possess knowledge
1. What is	113 (83%)	23 (17%)
'Computer'		
2. Storage	98	38
devices	(72%)	(28%)
3. Hardware	102 (75%)	34 (25%)
part of		
computer		
4. Software of	91 (67%)	45 (33%)
Computer		
5. Full form of	97 (71%)	39 (29%)
CPU		

Table .4 reveals that among the users, who indicated that they know how to operate computer are unaware of the software (33%), hardware (25%) 'Computer meaning (17%), Storage devices (28%) and (29%) of the respondents do not know the Full form of CPU

## KNOWLEDGE OF INTERNET

The Research student should know how to use the Internet for various purposes what are the different searching tools use for finding information, information about use the boolen operators including for finding the latest information needed for their studies, for communication with Research student and friends. For finding information regarding higher education, job opportunities etc. however, the use of Internet. Hence, in order to know the Research student competence in using Internet. A question was asked to those Research students who have said that they are competent to use the computer and the reposes in tabulated and presented information Table.

Table5: Level of skill to use Internet N=136

Internet Related Questions	No of student	Percentage
Very	44	32.35%
Somewhat	53	39.00%
Less	32	23.52%
Never	07	05.13%
Total	136	100.00%

It may be observed from the above table no.5 that majority of the students (39%) felt that they are somewhat skilled in the use of Internet they have medium level skills in accessing and retrieving information from Internet.

#### PURPOSE OF USING INTERNET:

**Table 6: Purpose of Using Internet (More than one answer)** 

N=129

Purpose	No. of	Percentage
	Students	
E-Mail	124	96.12%
Chatting	88	68.21%
Job Searching	112	86.82%
Searching Subject	97	75.19%
databases relevant to		
study		

The responses from students reveal some interest findings about the purpose of using Internet by students' highest percent of them (96.12%) are found to using Internet for mailing purpose followed by those who are browsing the net for the sake of jobs (86.82%). About (75.19%) percent of them are availing the net facility for searching the online data bases and for information related to their work other hand only (68.21%) of the students stated they are using net for chatting purpose.

# WEB TOOLS USED FOR ACCESS INFORMATION

Number of search and retrieval tools and resources are available on world wide web to facilitate easy access and retrieval of require information from web in order to access the extent of use of these tools by students data has been gather in this regard.

Table 7. Use of Web Tools (More than one answer)

N=129

Use Web	No. of	Percentages
Tools	Students	
Search engine	81	62.79%
Directories	56	43.41%
Websites	78	60.46%
Databases	63	48.83%
None	0	0%

Among various resources and tools available on web, highest percent of students (62.79%) are found information to be using search engines. Then (60.46%) students access information with the help

of different websites another (48.83%) stated that they access data bases on net. Web directories were used by only (43.41%) of the students for locating information on World Wide Web. The responses show that many of the web search tools are not used by majority of the students because of ignorance.

#### **SEARCH TECHNIQUES AWARENESS:**

The information on Internet can be searched using various search strategies and techniques different search techniques are developed for improving the quality of retrieval process

Table 8: Search Techniques Awareness : ( More than one answer)

N=129

		-,/
Search	No. of	Percentage
techniques use	Students	
Key word	78	60.46 %
searching		
Use Boolen	54	41.86 %
Operators		
Title,URL etc	61	47.28 %
Truncation	57	44.18 %

It may be observed from the above table 8 that majority of the students (60.46%) are using simple keyword search for searching and retrieving information from a database. About 47.28% are applying field search techniques. Truncation techniques and Boolean operators were used by only 44.18% and 41.86% of the users respectively. This indicates that majority of the students are not aware of the importance of various search mechanisms available for effective retrieval of information.

# AWARENESS OF DATABASES OF E-JOURNALS AND E-BOOKS AVAILABLE IN LIBRARY AND FREE ON INTERNET:

Table.9: Awareness of databases available in library and free on Internet (More than one answer)

N=129

Awareness of databases	No. of Students	Perc- entage
1) EBSCO database,UGC-Infonet Journals Available in library Book database available in SOUL 2.0	72	55.81 %

2) DOAJ, other Open access free e-journals and e-books directories and databases	57	44.18 %
Total	129	100%

# NEED OF INFORMATION LITERACY AND COMPUTER LITERACY PROGRAMMES FOR STUDENTS.

In order to elicit the students opinion about the need of information literacy and computer literacy programmes for the development of skills regarding how to use computer, how to search information sources on computer, how to search proper information and their sources and knowledge of information databases on internet in the University Library, the Research student were asked to indicate the degree of importance of such a Programme and the results are given in Table. 10

Table 10: Student's Opinion about the Need of Information Literacy and Computer Literacy Programmes

N=129

Degree of	No. of	Percentage
Importance	Respondents	
1.Most needed	113	87.59 %
2.Needed	11	8.5%
3.Some what need	0	0%
4.Not needed	3	2.32%
5.No Response	2	1.59%
Total	129	100.00%

Analysis of data in Table no. 10 reveals that the majority 87.59 % of the Research student feel that information literacy and computer literacy programmes are 'Most needed' 8.5% of them opine that such programmes are needed 0% consider 'somewhat needed' and only 2.32 % Think that it is 'not important' for them. And 1.59% of the Research students have not responded to the question.

#### **FINDING**

- Very few students of the total respondents (8.11%) do not know how to operate computer.
- Majority of those who have indicated that they know how to operate computer indeed do not know the basic concepts like hardware, software, programming languages, storage devise etc.

- Among those who indicated that they ability to use the computers, 5.13% of them do not have the capability to use the Internet.
- 55.81% Most of the students aware about databases available in library and Near about 54.19% students not aware about databases available in central library and 55.72% students are not aware about free DOAJ and other databases available on Internet
- 87.59% of the respondents opine that information literacy and computer literacy programmes in the Library are 'most needed' and they are enthusiastic to undergo such programmes to become self-learners and lifelong learners.

#### **SUGGESTIONS:**

In the present study author finding that the information literacy and computer literacy rate of the majority of the Research student are increase day by day due to applying good quality of orientation programmes started by the university Library. But there is a need to improve computer and information literacy. University administration has needed to promote computer courses for the students and give assistance to library for integration of computer and IL instruction in regular courses. IL skills can be promoted using the printed material on and through the college website. To start special cell for Guidance, training and assistance, including training on the use of the Internet, computer training, use of print and electronic sources, and databases.

#### CONCLUSION

Dr. B.A.M.U library play a very important role to provide quality of service to the users with implementing good quality orientation programmes and university administration also provide regular assistance to the library for develop their policies and services and students also develop their skills but other hand it is clear that some students does not aware about how to start computer, how to search internet and not aware about databases available in libraries and on internet their by we have need to develop their ICT knowledge and aware them by implementing more effective orientation programmes, training programmes

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